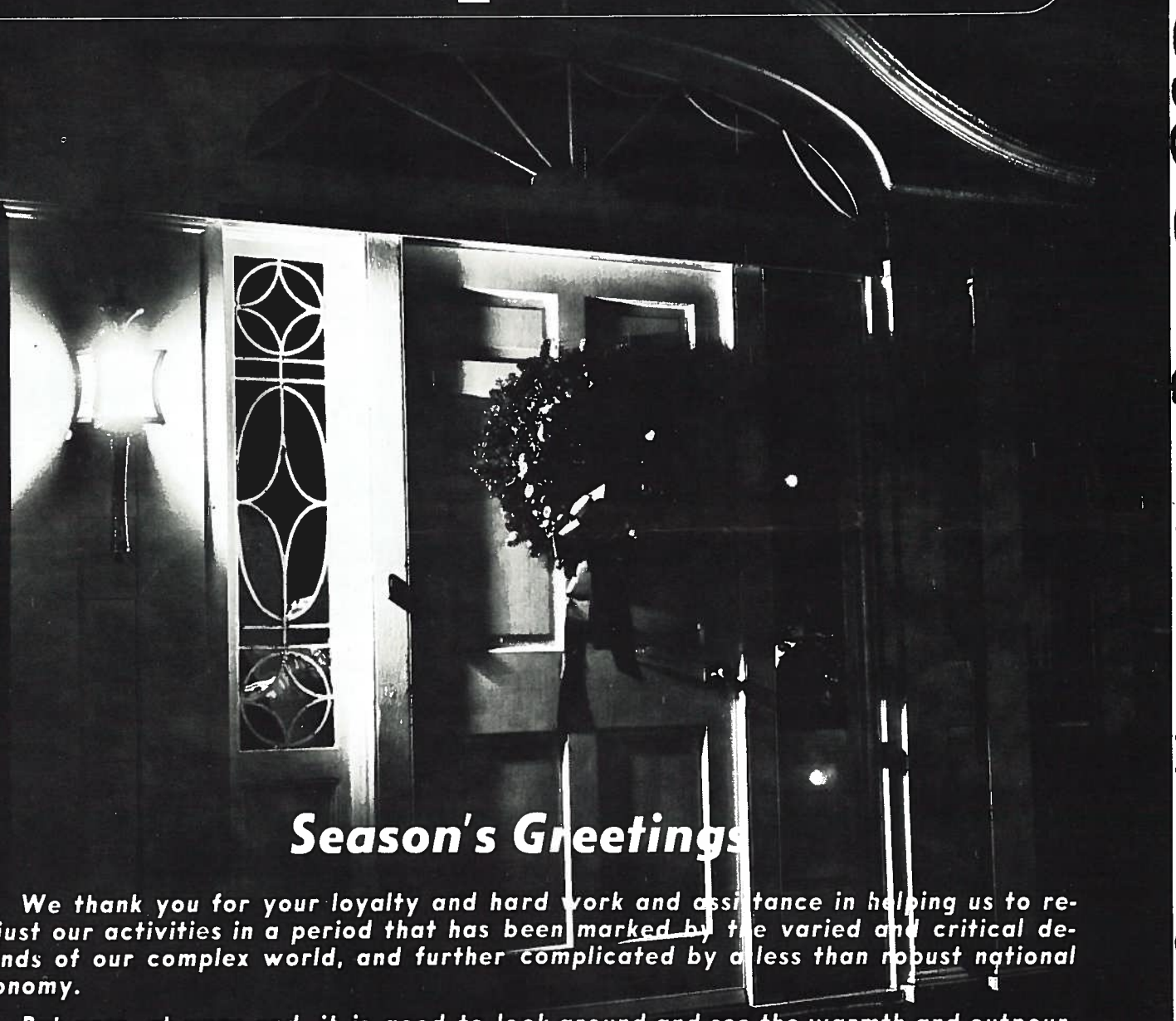
GRUMMAN
plane news
Vol. 30, No. 23, Bethpage, N. Y.,
December 21, 1971



Season's Greetings

We thank you for your loyalty and hard work and assistance in helping us to readjust our activities in a period that has been marked by the varied and critical demands of our complex world, and further complicated by a less than robust national economy.

But now, at year end, it is good to look around and see the warmth and outpouring of spirit that is so characteristic of the Christmas season at Grumman.

It is a time for family and friends; it is a time to reflect, on our own and corporate successes and disappointments; and it is a time to prepare ourselves for the coming year. We need the total dedication and involvement of all Grummanites if the Company is to stay healthy and prosperous. If we work together, we can achieve greater things in the year ahead.

We wish to extend to you and your families best wishes for the holiday season, and our hopes for a peaceful and prosperous New Year.

Lew Evans Bill Zarkowsky

Taking count. **Engineering Fund money was still coming in at press time. Counting dollars and checks are (L to R) Bob Kennedy, Ardith Tepedino, Judy Yoos. (Photo by Bob Settles)**

Holiday visits to vets, kids

Christmas comes but once a year, and here's how it's progressing at Grumman in 1971.

Donors responded to the persuasion of Jo Grimaldi and Elaine Montaperto of the Navy Office to give gifts or cash to hospitalized Vietnam servicemen. Grummanites in the F-14 Program offices in Plants 1 and 15 made it their cause, too. On December 14, Jo and Elaine, and Terri Woods and Joanne Butler of the F-14 Program distributed gifts at St. Albans Naval Hospital. "With the money that was given we bought 10 portable radios and six Instamatic cameras. The F-14 people gave enough to pay for two 18-inch color televisions," reported Jo Grimaldi. "Grumman gave us 30 baskets of fruit, and the Grumman people provided individual gifts for 400 patients."

Leo Senior, chairman of the Product Support Fund, announced $900 more than last year's $2,600, or a total of $3,500, was collected for families in need. "Money came in literally from all over the world, from Product Support people in Vietnam and on carriers, from Grumman Field Service employees everywhere. The Department came through with flying colors. Tremendous. Just great!" reported Senior. About 20 Field Service reps asked that their Christmas turkeys be distributed, too.

The long-established Engineering Christmas Fund was running somewhat behind the $5,065 total contributed last year for families and individuals whose plights were brought to the attention of the Fund committee. "We think a lot more will come in," Muriel Leighton said last week. "Somehow the cases this year seem more hopeless—fathers sick or out of work for a long time, a widow with a family of young children, people needing encouragement. . . ."

Supply Operations, Plant 30, adopted St. Christopher's Home in Sea Cliff, taking bicycles, baby walkers, wagons, and other large toys. "Hicksville Bicycle Shop was very generous and so was the Campagne Trucking Company," reported Chairman Phil Duhamel. "Everybody went out of the way to help. It was a great success," he said.

Carrying on a long tradition, Shipping & Spares Consolidation, sparked by Jerry Mason, Tony Friscia, and Linda Kost, collected $1,000, which they took last week to St. Mary of the Angels Home in Syosset. Mike Broszazak went along as Santa.

Storm warning network

In the event of severe snowstorms or other emergencies this winter, information concerning plant closing will be available by dialing either of two Grumman telephone numbers or will be carried on local radio stations.

Call LR 5-5111 in Bethpage or PA 7-1504 in Calverton, beginning at 5 a.m.

The radio stations carrying plant closing information, beginning at 5 a.m., are:

WMCA	**570**	**WOR**	**710**	**WHN**	**1050**	**WBAB**	**1440**
WNBC	**660**	**WABC**	**770**	**WGBB**	**1240**	**WTHE**	**1520**

Does Plant Protection have a record of your license plate number? Cards are available from Employee Services representatives. Fill one out and return it to ESO. With these on file, Plant Protection can let you know if you have left your lights on, have left your engine running, have a flat tire, or need to move your car for snow removal.

Complete NPE trials on F-14

The Navy Preliminary Evaluation of Tomcats 1-X and No. 2 has ended. The Navy NPE team was scheduled to present a critique on their findings on Saturday, December 18, with Navy, Corporate officers, and F-14 Program people in attendance.

About six weeks from now, the Navy is expected to issue a full "mission suitability" report.

During the NPE, 1-X had 14 flights and racked up 31.9 hours. It flew supersonically for 74.5 minutes. Tomcat No. 2 flew 25 flights and chalked up 42 flight hours. All in 14 days.

There's another progress note on the F-14:

Tomcat No. 5, enroute to the Pacific Missile Range at Point Mugu from Calverton, made a refueling stop at Dallas December 11.

Among those on hand to meet Grumman Test Pilot Pete Purvis and MCO Marty Lachow during their brief stopover were Capt. Louis J. Muery Jr., commanding officer of the Naval Air Station, Dallas, and Rep. James Collins of Texas.

No. 5 is the second Tomcat to go to Point Mugu for avionics testing. To follow are Tomcats 6, 9, and 11, all for testing with the AWG-9 missile system.

Outpouring. **Supply Operations, Plant 30, is celebrating with gifts of BIG things for the little kids of St. Christopher's Home in Sea Cliff. Phil Duhamel (L) is chairman; Dick Erdody will be Santa. (Photo by Larry Van Wallendael)**

CALENDAR of events

Notice of events for period Jan. 14 - Jan. 28 should reach Plane News by **Tues., Jan. 4.**

Amateur Radio Club: Wed., Jan. 19, 5 p.m., WA2LQO shack on roof of Plt. 5. E. Goodman, Ext. 87125.

Chess Club: Tues., 5 p.m., Plt. 3 cafe, tournaments, games. Alex Ikonnikow, Ext. 7592.

Coin Club: Wed., 12:05-12:50 p.m., Plt. 25 Vendor Conf. Rms. Ken Hale, Ext. 1936.

Duplicate Bridge Club: Thurs., 5:45 p.m., Plt. 3 cafe, reserv. not required, partnerships arranged. S. Stone, Ext. 3652.

Ex-Sevicemen's Club: Wed., Jan. 5, 7:30 p.m., Plt. 28 Audit., reg. month. mtg. Al Kordula, Ext. 87259.

Family Campers: Sun., Jan. 9, 5 p.m., Plt. 18, gen'l mtg. Bill Lord, Ext. 2914.

Fencing Club: Mon. & Wed., 4:30-6 p.m., Plt. 30 cafe, competitive fenc. & instruction. Joe Campisi, Ext. 87587.

Retiree Club: Wed., Dec. 29, 12:30 p.m., Holiday Manor, annual holiday pty. GAA, Ext. 2133.

Ski Club: Wed., Dec. 22, 8:30 p.m., Holiday Manor, Hicksville Rd., Bethpage. Bill Flynn, Ext. 1823.

Soccer Club: Sun., Jan. 9, 12:30 p.m., Reserve team Glen Cove @ Glen Cove; 2:30 p.m., Premier team vs Bay Shore @ Bay Shore, league & cup competition. Karl Herrnkind, Ext. 3470.

Stamp Club: First 3 Wed. of ea. month, 5 p.m., Plt. 30 cafe, swap, circuit bks., sales, auctions, discussions. Marty Harow, Ext. 9171.

About the cover . . .

Many people at Grumman remember when the McGunnigle farm stood in back of Plant 5, and while jet planes roared into the air from the airport at Plant 4, horses grazed in an area just west of South Oyster Bay Road. The grazing lands are now mostly macadam, but the old farmhouse still stands, and its entrance—captured by Walt Hudson of Presentations Services—provided us with our Christmas cover.

plane GRUMMAN news

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Joint honor to Feldman

Jerry Feldman

Talk about stretching horizons! Jerry Feldman of Business Development, Plant 5, has risen to the rank of colonel in the Air Force Reserve and is the first recipient in the Reserves ever to be awarded a Joint Service Commendation Medal. "For outstanding performance of duty," says the citation, and "exceptionally outstanding achievement."

"Make a good suggestion and you're stuck with it," Feldman found out last winter. As commanding officer of a Reserve group that meets in Washintgon six times a year, he is tuned in to the national need for a strong Air Force Reserve and for interested, highly motivated Reservists—particularly in view of accelerated withdrawal of U.S. troops from Vietnam and current reductions in the active force. So last January he suggested, and was ordered then to organize and plan, a two-week program of lectures and seminars given by high-level DOD people for the first Defense Supply Agency Reserve Officer Symposium.

As chairman of the Symposium, he carried it through, displaying "unusual professional judgment, exceptional foresight, and planning expertise in the overall coordination and direction of the program." The Army took notice and is planning such a course for the future, he says.

Feldman entered the Army Air Corps in 1943 as a private, and in 1945 was honorably discharged as a first lieutenant after 35 bombing missions. In the Korean conflict he was recalled to active duty, this time serving as a System Program officer at Wright-Patterson Air Force Base.

He came to Grumman in 1966.

Holiday schedule

Since Christmas Day and New Year's Day fall on Saturday, both will be observed on Friday in all the Grumman plants. Christmas turkeys and bonus checks will be distributed to the day shift on the morning of December 23, and the night shift will receive theirs at the end of the December 22 shift. The day shift will report at their regularly scheduled hours; night shift personnel are to report at 5:30 p.m., Wednesday, December 22, regardless of their usual starting time.

Take care . . .

Maybe you've seen it already—lots and lots of Nassau County police cars cruising around. It's what the county's Commissioner of Police, Louis Frank, calls "Operation All-Out, a drive to cut the holiday accident toll."

It's a three-pronged effort. One, 600 county police on saturation patrol. Two, visits by police officers to offices and plants in the county to urge preventive measures "to ensure the safe departure of . . . employees from office festivities." And three, a suggestion to organize car pools, with a non-drinker at the wheel of each car.

You know . . . that makes a lot of sense . . .

Is that a promise?

Communications Director Art Leach, ever tuned to save the Company's money, throws out the suggestion: If a letter will do it, don't telephone. The U.S. Postal Service, he points out, is making good on its promise to give next-day delivery on mail to New York, New Jersey, Connecticut, Washington, D. C., and parts of Pennsylvania. He advises: "Take advantage of it and save the cost of a phone call when you can."

Payback on tuition

Students seeking tuition assistance through the Grumman Tuition Reimbursement Program are asked to submit their applications for the spring semester on a new form—G135 Revision 6. These new forms will be available after January 1, 1972, at all Employee Services Offices, Field Base Administration Offices, or from Employee Services representatives. Folders explaining the purpose and guidelines of the Program are also available at these locations.

Applications under the Program must be submitted to the Tuition Reimbursement Program Office within 15 days of the last normal registration date at the student's school. It is very important to both the student and the Program Office that the applications be completed accurately and submitted by the deadline date.

Albatross stamp

The Grumman Albatross has been commemorated by stamp from a small group of British-administered islands in the Indian Ocean, close to Africa.

The stamp find was made by John Stafford, who says he's been a collector for about 35 years, "and for the past five years I've concentrated on aircraft."

John wonders why the islanders chose the Albatross. All he has is a multitude of guesses. If anyone knows the story, call him, Ext. 7405.

Tuning in. **Marianne Silz (L) and Denise Howell are tuned in to this stereo set, one of 24 prizes being offered to United Fund participants at Grumman. (Photo by Bob Settles)**

Winding up Fund appeal

There's time between now and January 18, when the drive ends, to support the United Fund of Long Island. And your support is needed.

The fund goal this year is $4 million, $1.2 million more than last year. It's more because Nassau and Suffolk are in a population explosion, better medical equipment is being used (and it's costly), and inflation has raised hob with the economy.

All of this means that 19 non-profit hospitals and 60 voluntary agencies will be very sorely pressed if the $4 million goal is not reached. And people will suffer.

For those who have not already decided to give to the United Fund, all you need is a payroll deduction card, available at any Employee Services Office. That makes giving a fast and easy process: Just fill in the card, indicate the amount of money you want to be withheld each payday, and ESO (and Payroll) does the rest. And since you don't see the money, it's painless.

If you'd rather do it another way—by lump sum check or cash—that, too, can be arranged. Again, contact any ESO representative. By the way, when you sign up you'll get a sticker that shows you've given, and, if you want, you can put that on a window pane so that "We Gave" is a signal to a walking-by solicitor that he need not knock. Of course, that goes only for the agencies taking part in the United Fund.

For those who have been using the payroll deduction system, none of this is new, but there is a point that may be worth noting: Even if you're in the plan now, you can always change your deduction. The ESO rep can do that for you, too.

So, it's a simple system and one that saves you from inconvenience while you are helping others. It's also a system that you may gain from . . . for no one is immune to ill health.

It's just about fool-proof.

We say thanks . . .

It's been a pleasure. Plane News appreciates the whole-hearted assistance and good relationships that have helped round out the paper during the year that just whizzed by.

And so we say thanks to the artists and photographers of Presentations Services for their wonderful cooperation in helping us to make our deadlines, to Transportation for dependable deliveries, and to the Mail Room and Reproduction Services for their help in distributing the paper all over the world.

You, our readers, have kept us tuned in on unusual events and sports news, and we thank you for your interest and constructive suggestions. Keep 'em coming.

We will return to our regular twice-a-month schedule. Plane News will be distributed on January 14 and 28.

Have a happy holiday!

OBITUARIES

Plane News has received word that death has come to the Grumman personnel listed below. We extend sincere sympathy to relatives and friends.

NICHOLAS J. FORTE JR., Mechanical Inspection, Plant 3, died December 9 at the age of 35. He had been with Grumman nine years. He lived at 28 St. Mark's Circle, Central Islip.

WINFIELD IRVINE died December 10 at the age of 60. He worked in Engraving, Plant 3, and had been with Grumman 30 years. His home was at 6 Klaffky Ct., Huntington.

Year in review: some disappointments, but 1971 filled with glistening achievements

A NEW BIRD, IT'S A WORLD OF TESTING

Shuttle t boost fro

Tomcat's flight-test off and winging at Calverton

Space Shut hopes hig NASA repo

It's quite unlikely that an historian will look back at the year 1971 and term it the best year that Grumman ever had.

It's equally unlikely that it will be judged as the bottom of a dark pit. There were too many hard-polished, glistening achievements for that sort of assessment; and there are too many solid prospects on the horizon to warrant doomsday thinking.

While it's obvious that we are not living in "the best of all possible worlds" (as the fictional figure Dr. Pangloss had phrased it), a sober look at this nation's aerospace industry suggests that we at Grumman may have suffered less than most. On balance, we have remained strong, despite the economic virus that discomfits us, the nation, and most of the world.

That the business down-turn has hurt us is beyond dispute. It's against that backdrop of financial distress that 1971 must, in part, be measured. Whenever any company is forced by lack of business—in our case, the decline in Governmental expenditures for military aircraft and space missions — to make sharp economies, employment will sag. So a reduction in force (RIF) came about and Grumman Corporation rolls dropped from 27,500 to about 24,000 people. Roughly half of the drop came through natural attrition: retirement, health, moving to other jobs, and so on. The other half were caught up in the RIF, and Vice President Tom Rozzi, director of Security and Personnel Services, made something clear:

"We want everyone to understand that those who were separated were not summarily dismissed. Grumman Aerospace has not found it easy to determine who would leave, and every effort has been made to be fair." And being fair included in-depth reviews of personnel and staffing requirements. Rozzi also promised that "If business conditions improve, many of those who have been terminated will be recalled."

There was little alternative . . .

Year of trial

There were tough challenges in '71, and some near-spectacular performances. One came out of a disaster that occurred just a day and a half before the New Year was to be ushered in: On December 30, 1970, the first Tomcat crashed during its second flight. About 25 minutes after takeoff, Test Pilot Bill Miller reported a loss of pressure in the prime hydraulic system. He and Test Pilot Bob Smyth, who was in the rear seat, made a turn to get back to the field at Calverton, some 30 miles away. As Tomcat No. 1 descended from 14,000 feet to 2,500 feet, Miller lowered the landing gear by pneumatic pressure. The field was just four miles away. Then Tomcat lost its other prime hydraulic system, the flight control system, and Miller switched to the Combat Sur-

Kelly sees further cost slashes as key factor in Shuttle decision

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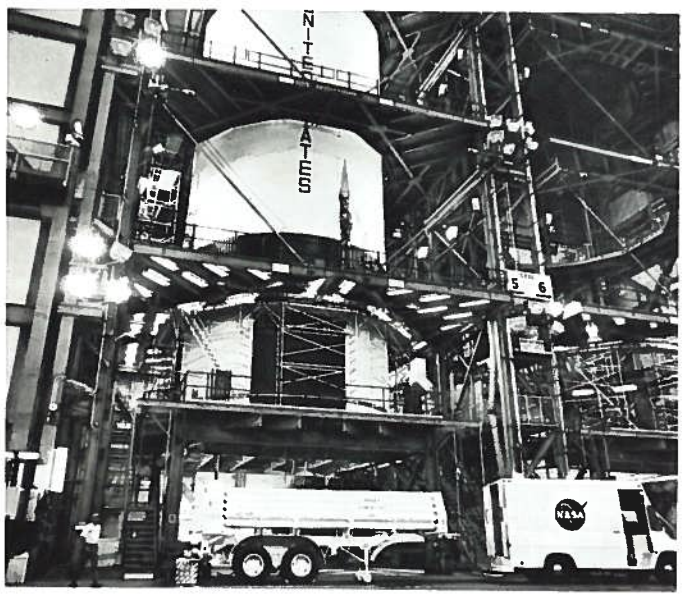
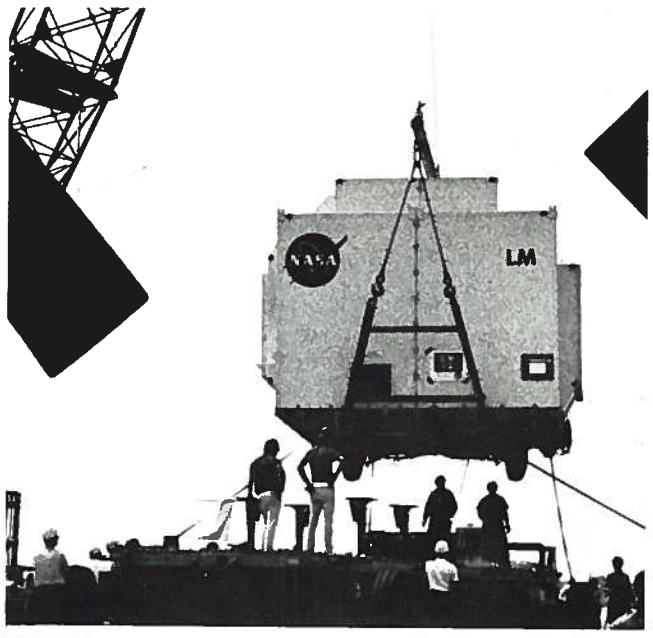
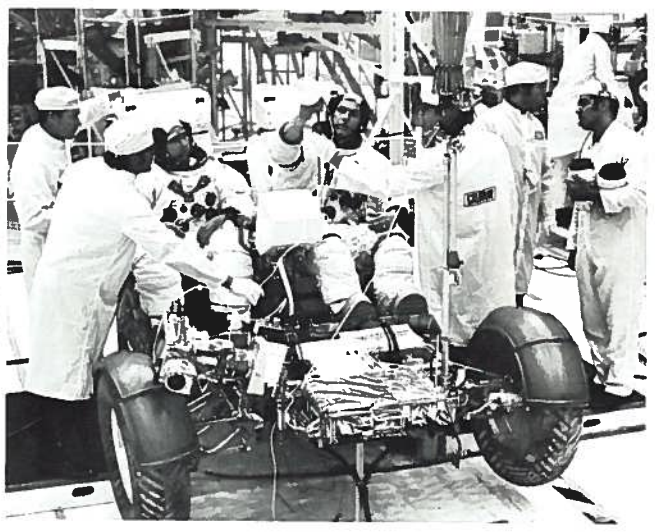
Astronauts meet Grummanites —

End of the beginning— goodbyes for last LM



The beginning and the end; in between— 'smashing success'

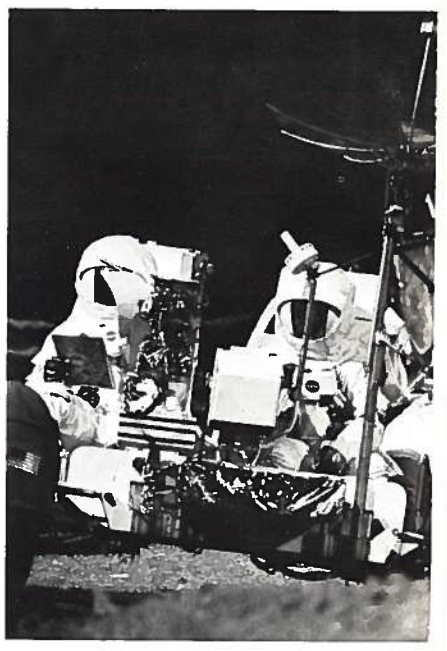




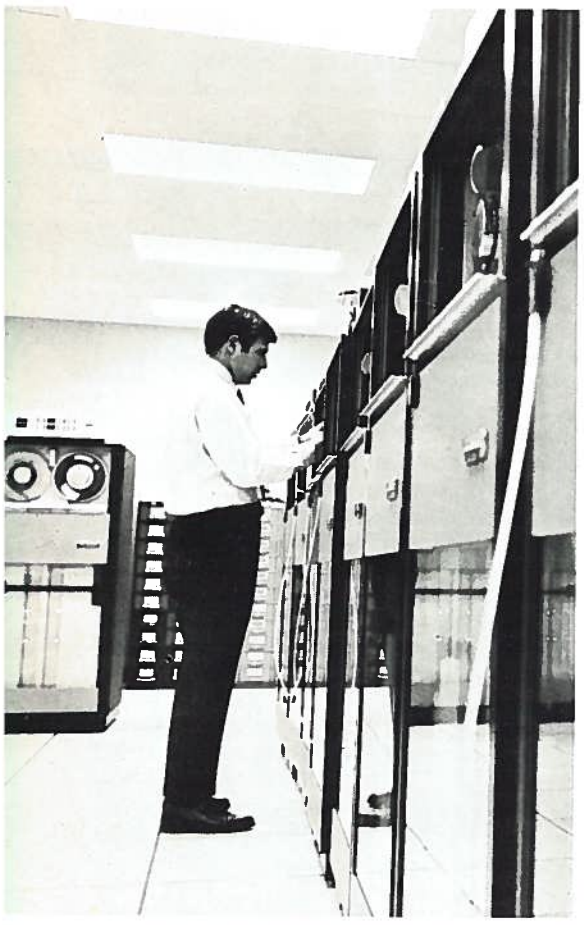
Apollo 15 crew embarking on most difficult journey

Record setter OAO, still 'or... nears third b... in space

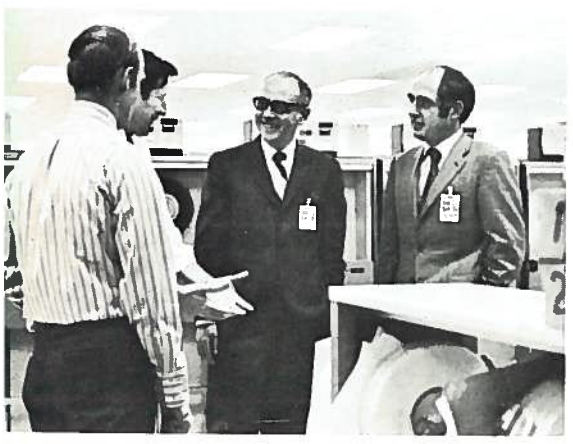
Space spinoff. Mayor John Lind... at Urban Technology Conference held ... Floyd Thomas (2nd R) and Don Hass... ment. Grumman and other aerospace ... to examine possibilities of transferrin... of the url...



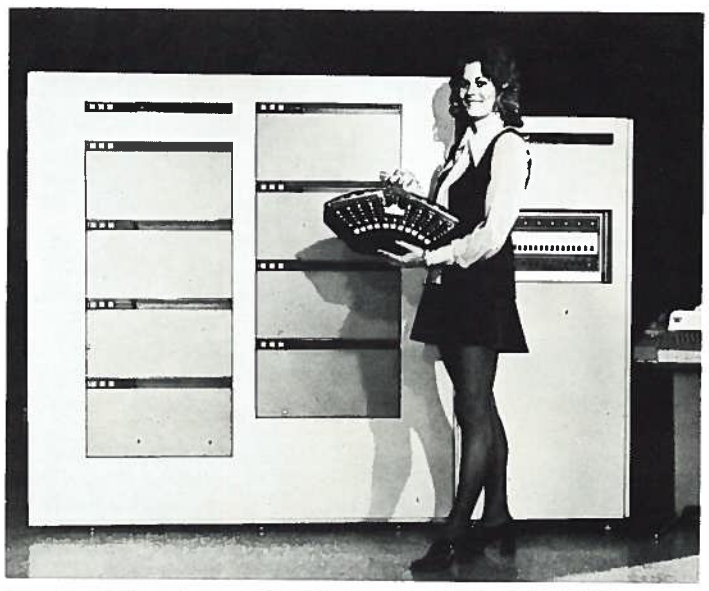
GDS opens New York office

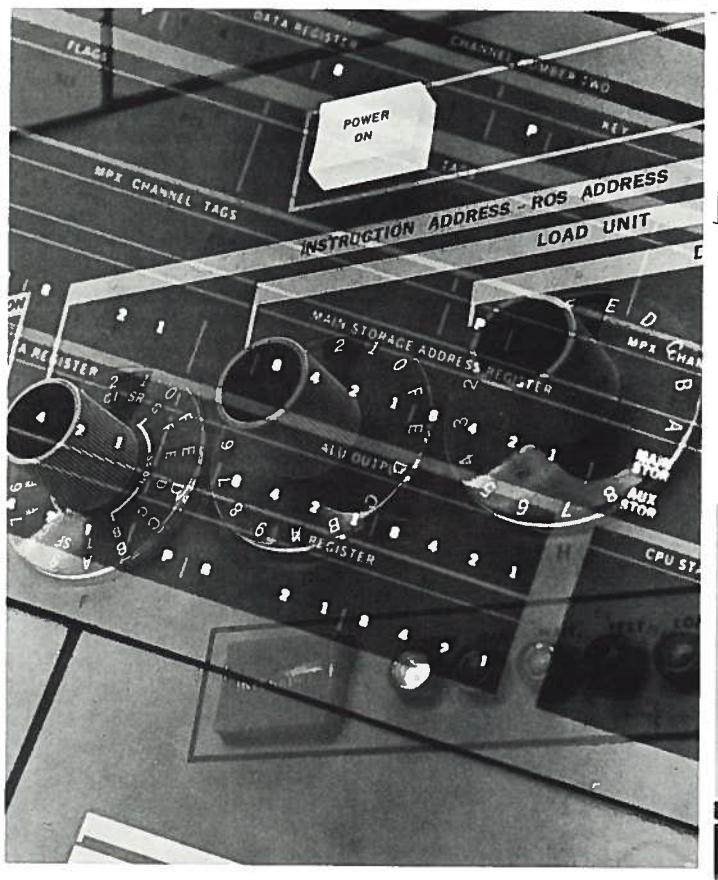


GDS acquires computer firm, looks to extend commercial sales



GDS unveils new mass memory system to computer world





Lew Evans succeeds Clint Towl as Aerospace Board Chairman; elect Bill Zarkowsky President

Fleet gets Grumman EA-6B Navy's newest ECM aircraft

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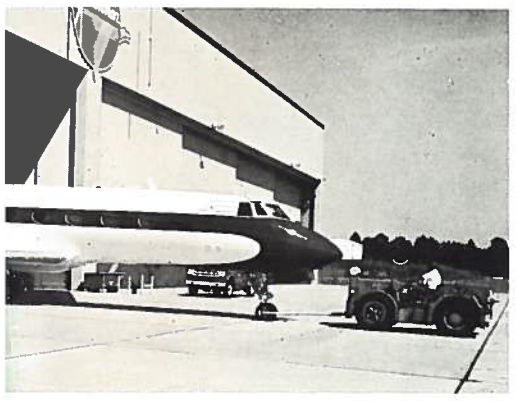


...ner relations: ...l payoff in ...am operations

vival System. Then the plane, just a few hundred feet from the landing strip, began to porpoise, and Miller ordered ejection. The plane slammed into the trees and exploded in a huge fireball and mushrooming black smoke. Rescue teams found both pilots alive and unhurt.

So the men and women on F-14 had a tremendous task before them in 1971. They and the Navy knew it.

As investigations of the crash by both Grumman and the Navy proceeded, work also proceeded on future Tomcats. The schedule slipped, of course, but there was determination to close that gap, and to do it quickly. On April 25, Tomcat No. 2, the aircraft designated for low-speed stall work, arrived at Calverton. A month later, Smyth and Miller took it up for its first flight.

"It was an absolutely clean flight from a systems standpoint," said Smyth. "We flew at between 120 and 240 knots and when we retracted the landing gear and flaps, it felt like it really wanted to go." The flight-test program was off and winging!

During the summer, Tomcats 1-X and No. 4 got to Calverton. Tomcat 1-X, the high-speed aircraft designated to replace the first Tomcat, first flew on August 31. The following day, it flew with a wing-sweep of 45 degrees; and the day after that, the wings were swept back to the maximum, 68 degrees. On September 16, 1-X flew supersonic.

No. 4 went to Grumman's facility at Point Mugu for weapons system testing . . . to be followed by Tomcats 5, 6, 9, and 11, all ticketed for the same type of testing with the AWG-9 missile system. Tomcat No. 3, the structural demonstration plane, is at Plant 7, as is 9. The production and flight test flow has been moving at a fine pace.

All in all, Tomcat (as a Grumman test pilot said) has been "the sweetest aircraft I've ever flown. That hummer is really going to do the job!"

Plaudits in space

F-14 is hardly the only program that has won plaudits. Apollo 14 LM-9 and Apollo 15 LM-10 did their jobs superbly. Apollo 14 roared into the sky from the Kennedy Space Center on January 31 and headed for Fra Mauro on the moon's surface. LM pilot Ed Mitchell and Spacecraft Commander Alan Shepard were walking on the lunar surface by February 5. They went through another EVA (Extra Vehicular Activity) on the 6th—a then record-setting combined total of 33½ hours of moonwalking for a single mission. They rejoined Stu Roosa, pilot of the Command Module, and began their long journey home, and splashed down February 9 close to their primary recovery vessel, the USS New Orleans. And on the 29th of March, they visited Grumman and got a warm reception on a day that was windy and cold as hell.

It may be that the Apollo 15 mission was the most impressive of all the moon trips. An all-Air Force crew, Dave Scott, James Irwin, and Al Worden, blasted off July 26—and for the first time, astronauts could ride around in a Lunar Roving Vehicle. Scott and Irwin made the most of it once they landed in the difficult, mountainous region of Hadley-Apennine. With three EVAs (instead of two) to work with, they traveled on the moon longer than had any previous astronaut team; each man was on the moon for some 20 hours. They brought back the now famous "genesis rock" — one thought to date back to the original crust of the moon, perhaps 4.6 billion years ago. Their rock and soil collection (175 pounds of it) is being investigated. Perhaps, there are clues there to the birth of the moon and the earth and the universe.

What may be a most important outcome of the venture was stated by Scott: "I think we witnessed the maturity of the Apollo system."

(To be noted, too, with some sadness, is that in June the Guppy—the plane that looks like a bloated whale—flew away with the last LM ascent and descent stages, leaving a production area once populated by some 1,600 engineers and technicians empty and silent.)

From the space program has flowed a remarkable stream of knowledge and practical usages. Technology transfers come with bewildering speed and in great number in such areas as communications satellites, computer techniques, grooved highways, light-weight portable routers, fire-retardant materials, new telemetry systems for medical use, highway and automobile safety concepts and devices, inert-gas welding, techniques for assessing earth resources, guidance control, management

Year in review: 1971

techniques . . . hardware . . . software . . . literally books full of new developments born of space technology.

Out of this, for one thing, has come Grumman Health Systems Department. There's a cancer-detection unit for females. There's a mobile intensive care operating table (MICOT). There's an operating room control console (ORCC). There's an extra-systemic organ transporter (ESOT). There's a kidney preservation unit (KPU). There's a prototype bus designed to transport handicapped children. In the works, too, is the possibility of modular clinics set up to expand and extend medical service as population warrants. Space technology has either inspired the ideas or made them feasible economically. And it's just the beginning.

Also in the world of space, Grumman/Boeing, battling from behind, won its way to equal footing with North American Rockwell and McDonnell Douglas in the Phase B design study of a Space Shuttle. Economy seems to be a basic factor in NASA's consideration of a prime contractor, and Grumman/Boeing came up with a plan that calls for a reusable version of Boeing's S-1C of the Saturn V. After considering many different design approaches, a plan had been chosen that could meet NASA's stringent cost limitations: A reusable orbiter with payload bay, crew station, and rocket engines. The fuel is liquid oxygen-hydrogen, to be carried in a large external, expendable propellant tank. It has long been clear to Grumman that an all-out effort was required for the Shuttle Program win, and that's the way it's been done.

In fact, the effort that has been made during the year to satisfy NASA and the nation that they're going to receive a fine Shuttle has been extraordinary. It was by no means easy to do; it wasn't a simple case of following one charted course. Rather, the job was to assess all practical possibilities . . . which meant continuing change along the way. All of the "redefinitions" necessarily added strain, a strain willingly borne, for the Shuttle is the biggest thing to come down the pike.

Hawkeye gets go-ahead

Elsewhere in space, the incredible Orbiting Astronomical Observatory (OAO-2) racked up its third year of operation on December 7. It's continuing to pump out valuable scienutific data though there are small limitations on its pointing direction. Its accomplishments led to a special message of commendation from President Richard Nixon.

But happiness isn't always the name of the game. Another space effort, HEAO (High Energy Astronomy Observatory), was cut down late in the year. Also lost was a bid for the Patrol Hydrofoil Guided Missile class ships, although the Company will continue to explore this military hydrofoil field.

There was good news in other quarters. Grumman/Boeing was one of three teams chosen by NASA to submit design plans to build a STOL (Short Take-Off and Landing) aircraft that is to feature speed, quiet, safety, and profitability. The design competition is to last six months, so this was a December bonus for the Company. The other competitors are (1) McDonnell Douglas, and (2) a team made up of Lockheed Aircraft, North American Rockwell, Bell Aerospace, and Cornell Aeronautical Laboratories, Inc.

There was a lot of aircraft action. The E-2C Hawkeye, the Navy's latest AEW (Airborne Early Warning) aircraft, which completed its first flight last January — one month ahead of schedule—now boasts an all-weather capability and can serve as a "traffic cop" in the sky. Critically important, the new Hawkeye— the plane with a pancake on top—can detect, identify, and track aircraft over both land and water. It's packed, too, with the latest aircraft niceties: new overland radar, updated computer, radar displays, and a new inertial guidance system. In the last half of the year, the Navy gave Grumman a go-ahead for 11 aircraft at about $156 million. The Defense Systems Acquisition Review Council earlier had approved a buy of 28 Hawkeyes spread over a three-year period.

Updated Intruder

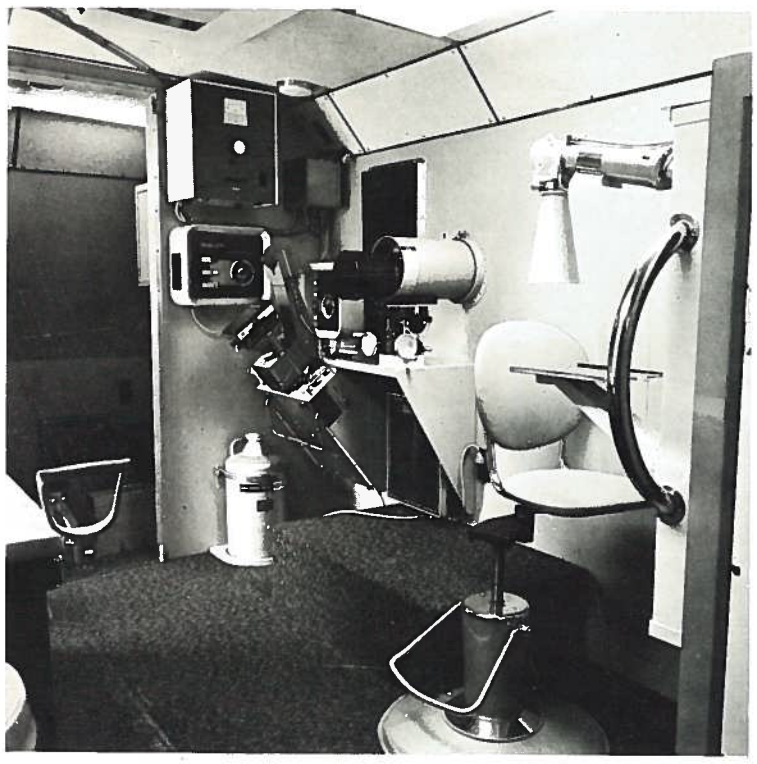
The A-6A, the plane for all seasons (said Time Magazine), has not only done its all-weather job well but it has led to a line of derivatives. One, the A-6E, an updated and very sophisticated version of the original A-6, has completed Navy BIS trials (Board of Inspection and Survey) at Patuxent River.

Then there's the EA-6B, the four-man Electronic Counter Measures (ECM) aircraft. The Zappers (VAQ-129)) were the first to train in the ultra-sophisticated aircraft — and they gave it rave notices.

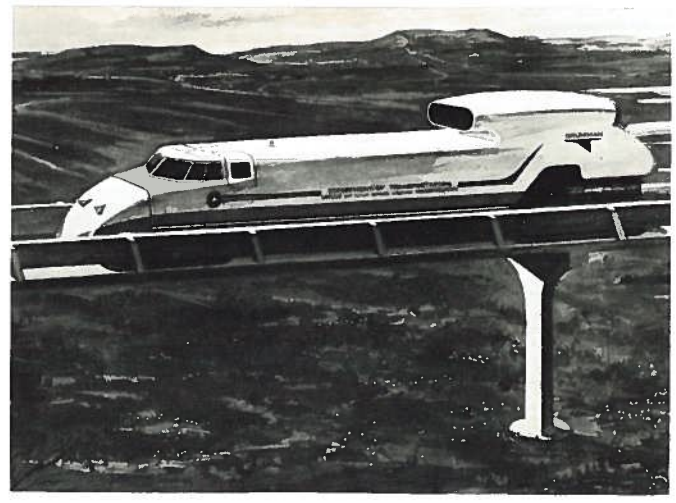
The KA-6D tanker, built in Stuart,

Health Systems — a new star in Corporation's firmament

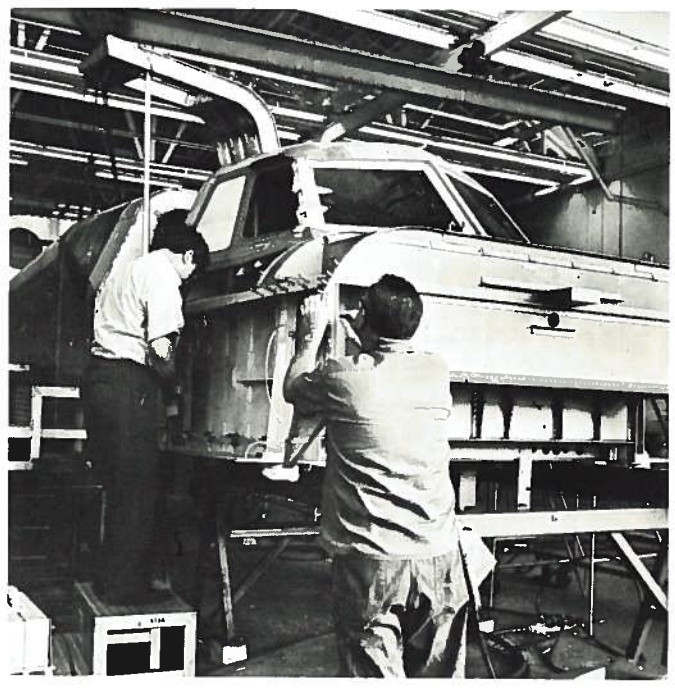
Space spinoff — Grumman developing equipment, facilities to meet medical needs



Test Intruder's new systems



Grumman awarded $3.5 million to construct air cushion vehicle



No rain, lots of kids help make Family Picnic festive affair

Florida, proved its value—as has the corporate fanjet Gulfstream II, being built at the Savannah, Georgia, Service Center. Savannah also built SEA-TAC, the 33-foot long subway type cars that are to be the "people movers" at the Seattle-Tacoma International Airport.

On June 30, good news came from the Secretary of Transportation, John Volpe: Grumman received a $3.5 million award to construct a Tracked Air Cushion Research Vehicle (TACRV). It is being built in Plant 4 and is to be delivered to the Department of Transportation High Speed Ground Test Center at Pueblo, Colorado, in April 1972.

Of marked consequence — though sometimes not thought about—are the twin pillars that keep Grumman ahead of the competition: Research and Advanced Development. From those two departments come the ideas for new tomorrows, ideas that may take 10, 15, or 20 more years to become new products. As an example, it was five years ago, at least, that the boron-epoxy program got under way, a program that has borne fruit in the F-14 horizontal stabilizer.

On other fronts

A Grumman Corporation subsidiary, Grumman Ecosystems, was active in research work, especially in Greenland where a three-month survey of the northern rim of that Danish-owned land was conducted. The magnetometer and photographic survey was commissioned by a consortium made up of Danes, Americans, and Canadians.

And Grumman Advance Civil Systems Department has received a contract from the Coast Guard to design, develop, build, and test a prototype waste treatment system for shipboard use.

In a different vein, the Company is investigating the control of biological characteristics of small land-based waste water treatment plants to improve their efficiency and reduce operating costs.

Grumman Data Systems — a year old last January — developed a new high-speed data storage and retrieval system called MASSTAPE. Its announced capabilities seem far ahead of any system in the field.

Less dramatic, perhaps, but of special import, were the moves made to realign and strengthen the Corporate structure. The first big change came on February 17: Lew Evans succeeded Clint Towl as Chairman of the Board and Chief Executive Officer of Grumman Aerospace. The new President of Aerospace is Bill Zarkowsky. Towl remains as Board Chairman of Grumman Corporation, the parent company. Corky Meyer was named a Senior Vice President, and two other men, Tom Kelly and Ross Mickey, were raised to Vice Presidents.

Below the vice presidential level, there were a lot of moves designed for even greater efficiency and productivity, many to streamline Manufacturing operations for the Tomcat program. Actually, there's little revolutionary, or even unusual, about all this: The heart of any viable organization is change for the better, an ongoing process of reaching beyond the high-water marks.

There was that kind of striving this year, a year of triumphs and losses, a year of adjustment . . . but one that signals hope and confidence for '72.